

Serial No. 10/601,733

PD-202133

REMARKS

## I. INTRODUCTION

In response to the Office Action dated August 30, 2006, claims 1, 11, 21, and 29 have been amended. Claims 1-23 and 25-30 remain in the application. Entry of these amendments, and re-consideration of the application, as amended, are respectfully requested.

## II. CLAIM AMENDMENTS

Applicant's attorney has made amendments to the claims as indicated above. These amendments were made solely for the purpose of clarifying the language of the claims, and were not required for patentability or to distinguish the claims over the prior art.

## III. PRIOR ART REJECTIONS

In paragraphs (1)-(2) of the Office Action, claims 1-3, 7-15, 19, 20, 29 and 30 were rejected under 35 U.S.C. §102(e) as being anticipated by Dye et al (Dye). In paragraphs (3)-(4) of the Office Action, claims 4-6 and 16-18 were rejected under 35 U.S.C. §103(a) as being obvious in view of the Dye. Claims 21-23 and 25-28 are rejected under 35 U.S.C. 103(a) as being obvious over Voois et al (Voois).

Applicant respectfully traverses these rejections, in light of the amendments above and the arguments below.

A. The Dye Reference

Dye describes a graphics controller which performs display list-based video refresh operations that enable objects with independent frame rates to be efficiently assembled. The graphics controller maintains a virtual display refresh list (VDRL) comprising a plurality of pointers to scan line segments in memory. The graphics controller also creates, maintains, and deletes draw display lists (DDLs) that comprise pointers to object display list subroutines (ODLs) that independently draw objects in memory. The ODLs may allocate one or more buffers in memory into which different frames of the objects are drawn. When an ODL has completed executing, the corresponding pointer in the DDL may be updated to point to the buffer location in memory that stores the newly completed object frame. The VDRL is maintained independently (and may be doubled-buffered) and is updated using the DDLs. Motion estimation may be performed by the

Serial No. 10/601,733

PD-202133

graphics controller using the different frames of objects that are drawn into memory by the ODLs. The different object frames may also be animated by the graphics controller once they are drawn into memory. The object frames stored in memory may be compressed to conserve memory.

Dye also discusses motion estimation (see Paragraphs [0455] through [0463]). Synchronization and blending of multiple data types that are animated is discussed to change the frame rate of the signals involved (see paragraph [0461]).

**B. The Voois Reference**

Voois merely describes a videophone apparatus with an on-screen telephone keypad user-interface. The videophone communicates video and audio data over a plain old telephone service (POTS) line and includes a video source and a communication channel interface circuit coupled to a programmable processor. The programmable processor is configured and arranged to execute a user interface program for user controlled operation of the videophone apparatus, display a first menu on the display, the first menu referencing a first plurality of options for operating the videophone apparatus and having associated therewith respective indicators of telephone keypad buttons, receive from the telephone keypad a first selection signal indicative of a pressed button, and initiate an operation to control the videophone apparatus in response to the first selection signal.

**C. The Claims are Patentable over the Cited References**

Independent claims 1, 11, 14, 21 and 29 are generally directed to personal multimedia devices and video conferencing systems. A personal multimedia device in accordance with the present invention comprises a media processing component configured to detect a frame rate of a received video signal, compare the frame rate to a frame rate native to the personal multimedia device, increase a frame rate of the received video signal when the frame rate of the received video signal is less than the frame rate native to the personal multimedia device by adding frames to the received video signal where the added frames are based on at least one of the received frames, and decrease the frame rate of the received video signal when the frame rate of the received video signal is greater than the frame rate native to the personal multimedia device by removing frames from the received video signal without modifying a frame adjacent to the removed frame.

The cited references do not teach nor suggest these various elements of Applicant's independent claims. Specifically, the cited references do not teach nor suggest at least the limitation of removing a frame from the received video signal without modifying a frame adjacent to the

Serial No. 10/601,733

PD-202133

removed frame when the frame rate of the received video signal is greater than the frame rate native to the personal multimedia device as recited in the claims of the present invention.

Applicant readily acknowledges that in a downconversion, there will inherently be fewer frames in the resultant video stream than there were in the original video stream. Applicant apologizes if the previous response was unclear on this point, and hopes that this response clarifies Applicant's position.

Dye changes the frame rate by, in essence, compressing the existing frames when the frame rate needs to be reduced. See, for example, FIG. 36B of Dye, where frames 962A, 962C, and 962E are blended to produce two frames, namely 962B and 962D. This compression shown in Dye requires additional processing power in the device performing this compression, additional processing time, and destroys the original information contained in the frames of the original video stream.

Such a compression or blending shown in Dye does not teach nor suggest removing frames from the received video signal when the frame rate of the received video signal is greater than the frame rate native to the personal multimedia device without modifying a frame adjacent to the removed frame as recited in the claims of the present invention. In fact, Dye teaches that the frames must be modified to remove the frame. Dye does not show merely presenting, for example, frames 962A and 962E without displaying frame 962C; instead, Dye blends these three frames together to generate fewer frames, namely frames 962B and 962D. The claims of the present invention have been clarified to further illustrate this difference between Dye and the present invention.

The ancillary Voois reference does not remedy the deficiencies of the Dye reference. Specifically, Voois does not teach nor suggest removing frames from the received video signal when the frame rate of the received video signal is greater than the frame rate native to the personal multimedia device without modifying a frame adjacent to the removed frames as recited in the claims of the present invention.

Moreover, the various elements of Applicant's claimed invention together provide operational advantages over Dye and Voois, for example, the processing speed of the present invention must inherently be faster than the processing speed of the Dye system, whether or not in combination with Voois. Memory and processor requirements for the present invention must also be less stringent than the Dye system, whether or not in combination with Voois, because the present invention does not have to store frames and blend them as taught in Dye. In addition, Applicant's invention solves problems not recognized by Dye and Voois.

Serial No. 10/601,733

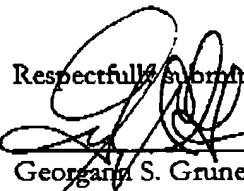
PD-202133

Thus, Applicant submits that independent claims 1, 11, 14, 21 and 29 are allowable over Dye and Voois. Further, dependent claims 2-10, 12, 13, 15-20, 22-23, 25-28 and 30 are submitted to be allowable over Dye and Voois in the same manner, because they are dependent on independent claims 1, 11, 14, 21 and 29, respectively, and thus contain all the limitations of the independent claims. In addition, dependent claims 2-10, 12, 13, 15-20, 22-23, 25-28, and 30 recite additional novel elements not shown by Dye and Voois.

#### IV. CONCLUSION

In view of the above, it is submitted that this application is now in good order for allowance and such allowance is respectfully solicited. Should the Examiner believe minor matters still remain that can be resolved in a telephone interview, the Examiner is urged to call Applicant's undersigned attorney.

Respectfully submitted,

  
Georgina S. Grunebach, Registration No.: 33,179  
Attorney for Applicants

Date: October 30, 2006

The DIRECTV Group, Inc.  
CA / LA1 / A109  
2230 E. Imperial Highway  
P.O. Box 956  
El Segundo, CA 90245-0956

Phone: (310) 964-4615